WHAT IS CLAIMED IS:

1. A cylindrical vibration-damping device comprising:

a rubber bushing including an inner sleeve, a resin outer sleeve disposed about the inner sleeve, and a rubber elastic body interposed between and elastically connecting the inner and outer sleeves;

a rigid mounting member having a cylindrical bore into which the rubber bushing is press fit;

at least one engaging stepped face formed on an inner surface of the mounting member; and

at least one engaged stepped face produced on an outer surface of the outer sleeve once the outer sleeve is press fit into the cylindrical bore of the mounting member, by means of elastic deformation of the outer sleeve, the at least one engaged stepped face being opposed to the at least one engaging stepped face in an axial direction of the device, and being brought into engagement with the at least one engaging stepped face so as to exhibit a resistance to dislodging of the rubber bushing from the mounting member in at least one of opposite axial directions.

2. A cylindrical vibration-damping device according to claim 1, wherein the outer sleeve is housed within the cylindrical bore of the mounting member over a substantially entire axial length thereof.

3. A cylindrical vibration-damping device according to claim 1, wherein the at least one engaging stepped face extends in a circumferential direction of the cylindrical bore of the mounting member.

4. A cylindrical vibration-damping device according to claim 3, wherein the at least one engaging stepped face extends in the circumferential direction over an entire circumference of the cylindrical

bore of the mounting member so as to be formed as an annular engaging stepped face.

5. A cylindrical vibration-damping device according to claim 3, wherein the at least one engaging stepped face comprises a plurality of engaging stepped faces extending in the circumferential direction and situated at respective circumferential positions spaced away from one another in the circumferential direction.

6. A cylindrical vibration-damping device according to claim 3, wherein at least one engaging stepped face comprises a plurality of the engaging stepped faces situated at respective axial positions spaced away from one another in the axial direction of the device.

7. A cylindrical vibration-damping device according to claim 6, wherein said plurality of engaging stepped faces includes a pair of engaging stepped faces facing mutually opposite axial directions.

8. A cylindrical vibration-damping device according to claim 7, wherein an axial distance between the pair of engaging stepped faces varies at at least one circumferential position of the device.

9. A cylindrical vibration-damping device according to claim 1, wherein the outer sleeve has a flange portion at one of opposite axial end thereof, the flange portion being brought into abutting contact with a corresponding axial end face of the mounting member, and the flange portion of the outer sleeve and the at least one engaging stepped face of the mounting member face mutually opposite axial directions.

10. A cylindrical vibration-damping device according to

claim 9, wherein the at least one engaging stepped face of the mounting member is spaced apart from the flange portion in the axial direction of the device, and an axial distance between the engaging stepped face and the flange portion varies at at least one circumferential position.

11. A cylindrical vibration-damping device according to claim 1, wherein at least one of axially opposite end portions of the outer sleeve has a tapered outer surface configuration.

12. A cylindrical vibration-damping device according to claim 1, wherein the outer surface of the outer sleeve is held in close contact with a surface of the mounting member.

13. A cylindrical vibration-damping device according to claim 1, further comprising: an engaging anti-rotation stepped face formed on the inner surface of the mounting member so as to be inclined by a given angle relative to a diametric direction perpendicular to the axial direction of the device; and an engaged anti-rotation stepped face produced on the outer surface of the outer sleeve once the outer sleeve is press fit into the cylindrical bore of the mounting member, by means of elastic deformation of the outer sleeve, the engaged anti-rotation stepped face being brought into engagement with the engaging anti-rotation stepped face so as to exhibit a resistance to rotation of the rubber bushing relative to the mounting member in a circumferential direction of the cylindrical bore of the mounting member.

14. A cylindrical vibration-damping device according to claim 13, wherein the engaging stepped face is inclined by a given angle with respect to the diametric direction so that the engaging stepped face serves as the engaging anti-rotation stepped face as well as the engaging

stepped face.

15. A cylindrical vibration-damping device according to claim 13, wherein the engaging anti-rotation stepped face extends in the axial direction of the device.

16. A cylindrical vibration-damping device according to claim 1, wherein the mounting member is composed of a plurality of segments having different inside diameters, the segments being assembled together in the axial direction of the device to define therein the cylindrical bore.

17. A cylindrical vibration-damping device comprising:

a rubber bushing including an inner sleeve, a resin outer sleeve disposed about the inner sleeve, and a rubber elastic body interposed between and elastically connecting the inner and outer sleeves; and

a rigid mounting member having a cylindrical bore into which the rubber bushing is press fit,

wherein an inner surface of the mounting member includes an annular recessed portion formed partially in an axial direction thereof so that a first engaging stepped face is formed with an annular configuration at a boundary between the annular recessed portion and an annular non-recessed portion axially adjacent to the annular recessed portion,

wherein the outer sleeve has an outside diameter larger than an inside diameter of the annular non-recessed portion of the mounting member before being press fit into the cylindrical bore of the mounting member, the outer sleeve being press fit into the cylindrical bore of the mounting member while constricting in diameter in association with elastic deformation of resin, and expanding in the outside diameter at a first portion situated facing the annular recessed portion of the mounting

member by means of elastic recovery force of the resin after being press fit so that an outer surface of the outer sleeve deforms to a stepped configuration conforming to the inner surface of the cylindrical bore of the mounting member and a first engaged stepped face is produced on the outer surface of the outer sleeve with an annular configuration, and

wherein the first engaging stepped face of the mounting member and the first engaged stepped face of the outer sleeve are opposite to each other in the axial direction of the device, and are brought into engagement with each other so as to provide a resistance to dislodging of the rubber bushing from the mounting member in one of opposite axial directions.

18. A cylindrical vibration-damping device according to claim 17, wherein the first portion of the outer sleeve situated facing the annular recessed portion of the mounting member once the outer sleeve is press-fit into the cylindrical bore of the mounting member, permits an amount of elastic recovery deformation larger than that in a second portion of the outer sleeve situated facing the annular non-recessed portion so that the outer surface of the outer sleeve deforms to the stepped configuration conforming to the inner surface of the cylindrical bore of the mounting member.

19. A cylindrical vibration-damping device according to claim 17, wherein the outer sleeve before being press fit into the bore of the mounting member has an axially straight outer surface configuration.

20. A cylindrical vibration-damping device according to claim 17, wherein the annular recessed portion is situated at an axially intermediate portion of the mounting member so that the recessed portion is interposed between two annular non-recessed portions situated axially

opposite sides thereof, wherein the first engaging stepped face is formed at a boundary between the annular recessed portion and one of the two annular non-recessed portions, and a second engaging stepped face is formed at a boundary between the annular recessed portion and an other of the two annular non-recessed portions, the first and second engaging stepped faces face mutually opposite axial directions, wherein the outer surface of the outer sleeve deforms to the stepped configuration conforming to the inner surface of the cylindrical bore of the mounting member so that the first engaged stepped face and a second engaged stepped face are produced on the outer surface of the outer sleeve at respective positions situated facing the first and second engaging stepped faces, and wherein the first engaging stepped face of the mounting member and the first engaged stepped face of the outer sleeve are opposite to each other in the axial direction of the device, and are brought into engagement with each other so as to exhibit a resistance to dislodging of the rubber bushing from the mounting member in one of opposite axial directions, while the second engaging stepped face of the mounting member and the second engaged stepped face of the outer sleeve are opposed to each other in the axial direction of the device, and are brought into engagement with each other so as to exhibit a resistance to dislodging of the rubber bushing from the mounting member in an other of opposite axial directions.

21. A cylindrical vibration-damping device according to claim 17, wherein the mounting member is composed of a plurality of segments each having a cylindrical bore, and the recessed portion is formed by using one of the plurality of segments whose bore has a greatest inside diameter.

22. A cylindrical vibration-damping device according to claim 17, wherein the recessed portion of the mounting member has an

inside diameter that is not larger than a largest outside diameter of the first portion of the outer sleeve as measured before the outer sleeve being press fit into the bore of the mounting member.

23. A cylindrical vibration-damping device according to claim 17, wherein a wall thickness of the outer sleeve is large at the first portion situated facing the recessed portion, and is small at the second portion situated facing the non-recessed portion, before being press fit into the mounting member.

24. A cylindrical vibration-damping device according to claim 23, wherein the first portion of the outer sleeve has an outside diameter larger than that of the second portion so as to have the first portion thicker than the second portion.

25. A cylindrical vibration-damping device according to claim 17, further comprising: an engaging anti-rotation stepped face formed on the inner surface of the mounting member so as to be inclined by a given angle relative to a diametric direction perpendicular to the axial direction of the device; and an engaged anti-rotation stepped face produced on an outer surface of the outer sleeve once the outer sleeve is press fit into the cylindrical bore of the mounting member, by means of elastic recovery force of the outer sleeve, the engaged anti-rotation stepped face being brought into engagement with the engaging stepped face so as to exhibit a resistance to rotation of the rubber bushing relative to the mounting member in a circumferential direction of the cylindrical bore of the mounting member.

26. A cylindrical vibration-damping device according to claim 25, further comprising a second engaging stepped face formed at a

boundary between the annular recessed portion and an other non-recessed portion, the first and second engaging stepped faces facing mutually opposite axial directions, wherein the outer surface of the outer sleeve deforms to the stepped configuration conforming to the inner surface of the cylindrical bore of the mounting member so that the first engaged stepped face and a second engaged stepped face are produced on the outer surface of the outer sleeve at respective positions situated facing the first and second engaging stepped faces, wherein the first engaging stepped face of the mounting member and the first engaged stepped face of the outer sleeve are opposite to each other in the axial direction of the device, and are brought into engagement with each other so as to exhibit a resistance to dislodging of the rubber bushing from the mounting member in one of opposite axial directions, while the second engaging stepped face of the mounting member and the second engaged stepped face of the outer sleeve are opposed to each other in the axial direction of the device, and are brought into engagement with each other so as to exhibit a resistance to dislodging of the rubber bushing from the mounting member in an other of opposite axial directions, and wherein one of the first and second engaging stepped faces extends in a direction parallel to the diametric direction, and an other one of the first and second engaging stepped faces is inclined by a given angle relative to the diametric direction so as to serve as the engaging anti-rotation stepped face as well.

27. A cylindrical vibration-damping device according to claim 26, wherein the second engaging stepped face is formed by a flange portion formed at one of opposite axial end of the mounting member, and the second engaged stepped face is formed by one axial end face of the mounting member with which the flange portion is brought into abutting contact with.

28. A cylindrical vibration-damping device according to claim 27, wherein the flange portion is inclined by a given angle relative to the diametric direction perpendicular to the axial direction of the device so that the engaging anti-rotation stepped face is formed by the flange portion.

29. A cylindrical vibration-damping device according to claim 27, wherein the at least one engaging stepped face is inclined by a given angle relative to a diametric direction perpendicular to the axial direction of the device so that the engaging anti-rotation stepped face is formed by the at least one engaging stepped face.

30. A cylindrical vibration-damping device according to claim 26, wherein the annular recessed portion is situated at one axial opposite end portion of the mounting member and another annular recessed portion is situated at an other axial opposite end portion of the mounting member so that the non-recessed portion is interposed between the annular recessed portion and the other annular recessed portion in the axial direction of the device, the first engaging stepped face is formed at a boundary between the annular recessed portion and the non-recessed portion facing one of opposite axial directions, and the second engaging stepped face is formed at a boundary between the other annular recessed portion and the non-recessed portion facing an other one of opposite axial directions.

31. A method of assembling a cylindrical vibration-damping device including a rubber bushing including an inner sleeve, a resin outer sleeve disposed about the inner sleeve, and a rubber elastic body interposed between and elastically connecting the inner and outer sleeves; a rigid mounting member having a cylindrical bore into

which the rubber bushing is press fit; at least one engaging stepped face formed on an inner surface of the mounting member; and at least one engaged stepped face produced on an outer surface of the outer sleeve once the outer sleeve is press fit into the cylindrical bore of the mounting member, by means of elastic deformation of the outer sleeve, the at least one engaged stepped face being opposed to the at least one engaging stepped face in an axial direction of the device, and being brought into engagement with the at least one engaging stepped face so as to exhibit a resistance to dislodging of the rubber bushing from the mounting member in at least one of opposite axial directions, said method comprising the steps of: press fitting the rubber bushing into the bore of the mounting member; permitting an elastic deformation of the mounting member so that the outer sleeve is deformed to a stepped configuration conforming to the inner surface of the bore of the mounting member; and forming the engaged stepped portion on the outer surface of the outer sleeve that is brought into engagement with the engaging stepped portion.